

Amendments to the Claims

This listing of claims replaces all prior versions and listings of claims in the application.

Listing of Claims

1. (Currently Amended) A method for removing a resist pattern, comprising:
forming a metal film over a substrate;
forming a resist film of a positive resist composition containing a photosensitizer;
exposing the resist film;
developing the resist film to form a resist pattern over the metal film by using a developer;
etching the metal film by using the resist pattern;
irradiating the resist pattern with a light having a photosensitive wavelength region of the photosensitizer to ~~react the photosensitizer in~~ expose the resist pattern entirely to the light after etching the metal film; and
after irradiating the resist pattern on the entire surface of the substrate, applying a resist stripper which dissolves and removes the resist pattern.
2. (Previously Presented) A method for removing a resist pattern, comprising:
forming a metal film over a substrate;
forming a resist film of a positive resist composition containing a photosensitizer;
exposing the resist film;
developing the resist film to form a resist pattern over the metal film by using a developer;
etching the metal film by using the resist pattern;
removing the resist pattern by using a resist stripper which dissolves and removes the resist pattern after etching the metal film;

irradiating a residue of the resist pattern with a light having a photosensitive wavelength region of the photosensitizer to react the photosensitizer in the residue of the resist pattern to the light after removing the resist pattern; and

after the irradiating the residue of the resist pattern, removing the residue of the resist pattern by using the developer which dissolves and removes the residue of the resist pattern.

3-4. (Canceled)

5. (Previously Presented) A method for removing a resist pattern according to claim 1, wherein the positive resist composition containing the photosensitizer is a diazonaphthoquinone (DNQ)-novolac resin type, and wherein the photosensitizer is diazonaphthoquinone (DNQ).

6. (Previously Presented) A method for removing a resist pattern according to claim 2, wherein the positive resist composition containing the photosensitizer is a diazonaphthoquinone (DNQ)-novolac resin type, and wherein the photosensitizer is diazonaphthoquinone (DNQ).

7-8. (Canceled)

9. (Previously Presented) A method for removing a resist pattern according to claim 1, wherein the metal film forms an electrode of a thin film transistor.

10. (Previously Presented) A method for manufacturing a semiconductor device according to claim 2, wherein the metal film forms an electrode of a thin film transistor.

11-19. (Canceled)

20. (Previously Presented) A method for removing a resist pattern according to claim 1, wherein the substrate is selected from the group consisting of a glass, a quartz, a semiconductor, a plastic, a plastic film, a metal, a glass-epoxy resin, and a ceramic.

21. (Previously Presented) A method for removing a resist pattern according to claim 2, wherein the substrate is selected from the group consisting of a glass, a quartz, a semiconductor, a plastic, a plastic film, a metal, a glass-epoxy resin, and a ceramic.

22-23. (Canceled)

24. (Previously Presented) A method for removing a resist pattern according to claim 1, wherein the metal film comprises a material selected from the group consisting of aluminum, titanium, molybdenum, tantalum, and tungsten.

25. (Previously Presented) A method for removing a resist pattern according to claim 2, wherein the metal film comprises a material selected from the group consisting of aluminum, titanium, molybdenum, tantalum, and tungsten.

26-27. (Canceled)

28. (Previously Presented) A method for removing a resist pattern according to claim 1, wherein the resist stripper has a mixture of 2-aminoethanol and a glycol ether as a composition.

29. (Previously Presented) A method for removing a resist pattern according to claim 2, wherein the resist stripper has a mixture of 2-aminoethanol and a glycol ether as a composition.

30-31. (Canceled)

32. (Currently Amended) A method for removing a resist pattern according to claim 1, wherein the light has [[a]] multiple wavelengths within the range of photosensitive wavelength region of the photosensitizer.

33. (Currently Amended) A method for removing a resist pattern according to claim 2, wherein the light has [[a]] multiple wavelengths within the range of photosensitive wavelength region of the photosensitizer.

34-35. (Canceled)

36. (Previously Presented) The method of claim 1, wherein exposing the resist film includes irradiating the resist film with light having the photosensitive wavelength region of the photosensitizer.

37. (Previously Presented) The method of claim 2, wherein exposing the resist film includes irradiating the resist film with light having the photosensitive wavelength region of the photosensitizer.

38. (New) A method for manufacturing a semiconductor device, comprising the steps of:
forming a metal film over a substrate;
forming a resist film of a positive resist composition containing a photosensitizer;
exposing the resist film;
developing the resist film to form a resist pattern over the metal film by using a developer;
etching the metal film by using the resist pattern;
irradiating the resist pattern with a light having a photosensitive wavelength region of the photosensitizer to expose the resist pattern entirely to the light after etching the metal film; and
after irradiating the resist pattern on the entire surface of the substrate, applying a resist stripper which dissolves and removes the resist pattern.

39. (New) A method for manufacturing a semiconductor device, comprising the steps of:
forming a metal film over a substrate;
forming a resist film of a positive resist composition containing a photosensitizer;
exposing the resist film;
developing the resist film to form a resist pattern over the metal film by using a developer;
etching the metal film by using the resist pattern;
removing the resist pattern by using a resist stripper which dissolves and removes the resist pattern after etching the metal film;
irradiating a residue of the resist pattern with a light having a photosensitive wavelength region of the photosensitizer to react the photosensitizer in the residue of the resist pattern to the light after removing the resist pattern; and
after the irradiating the residue of the resist pattern, removing the residue of the resist pattern by using the developer which dissolves and removes the residue of the resist pattern.

40. (New) The method according to claim 38,
wherein the positive resist composition containing the photosensitizer is a diazonaphthoquinone (DNQ)-novolac resin type, and
wherein the photosensitizer is diazonaphthoquinone (DNQ).

41. (New) The method according to claim 39,
wherein the positive resist composition containing the photosensitizer is a diazonaphthoquinone (DNQ)-novolac resin type, and
wherein the photosensitizer is diazonaphthoquinone (DNQ).

42. (New) The method according to claim 38, wherein the metal film forms an electrode of a thin film transistor.

43. (New) The method for according to claim 39, wherein the metal film forms an electrode of a thin film transistor.

44. (New) The method according to claim 38, wherein the substrate is selected from the group consisting of a glass, a quartz, a semiconductor, a plastic, a plastic film, a metal, a glass-epoxy resin, and a ceramic.

45. (New) The method according to claim 39, wherein the substrate is selected from the group consisting of a glass, a quartz, a semiconductor, a plastic, a plastic film, a metal, a glass-epoxy resin, and a ceramic.

46. (New) The method according to claim 38, wherein the metal film comprises a material selected from the group consisting of aluminum, titanium, molybdenum, tantalum, and tungsten.

47. (New) The method according to claim 39, wherein the metal film comprises a material selected from the group consisting of aluminum, titanium, molybdenum, tantalum, and tungsten.

48. (New) The method according to claim 38, wherein the resist stripper has a mixture of 2-aminoethanol and a glycol ether as a composition.

49. (New) The method according to claim 39, wherein the resist stripper has a mixture of 2-aminoethanol and a glycol ether as a composition.

50. (New) The method according to claim 38, wherein the light has multiple wavelengths within the range of photosensitive wavelength region of the photosensitizer.

51. (New) The method according to claim 39, wherein the light has multiple wavelengths within the range of photosensitive wavelength region of the photosensitizer.

52. (New) The method of claim 38, wherein exposing the resist film includes irradiating the resist film with light having the photosensitive wavelength region of the photosensitizer.

53. (New) The method of claim 39, wherein exposing the resist film includes irradiating the resist film with light having the photosensitive wavelength region of the photosensitizer.